available it was contended that it would well repay the Club to organize a camp-out in the spring. The views, kindly shown by Mr. J. Searle, certainly showed that the locality is not wanting in beautiful scenery.

### NATURAL HISTORY NOTES.

Mr. T. S. Hall, M.A., read a note on a new method for the

extraction of friable fossils in sandy strata.

Mr. D. Le Souëf exhibited portion of the stomach of an eel, showing where a crayfish which it had devoured had perforated the lining of the stomach of its captor. The fish was caught by Mr. Macgregor at Macedon on a night line, showing that the injury did not prevent its feeding.

#### EXHIBITION OF SPECIMENS.

The following were the principal exhibits of the evening:—By Mr. A. Coles.—Five bones forming complete toe of the extinct New Zealand Moa, Moa giganticus. By Mr. C. French, F.L.S .-Exotic moths: Actias luna, from North America; A. selene, from Himalayas; A. mimosæ, from South Africa. By Mr. C. French, jun.—Eggs of the following Australian birds, viz.:—Yellow-necked Mangrove Bittern from Queensland, White Tern from Norfolk Island, Princess of Wales Parrakeet, Red-backed Kingfisher, and White-breasted Turnix (new) from Central Australia, Australian Jabiru and Cat Bird from New South Wales. By Mr. W. H. Ferguson.—Photograph of Rock Wallaby on trees. By Mr. J. H. Gatliff.—Struthiolaria papulosa, Mart., S. inermis, Sowb., from New Zealand, and S. (Pelecaria) scutulata, Dish., from New South Wales. By Mr. S. A. Masters.—Orchid, Pterostylis vittata, from Healesville (new locality). By Mr. James Mitchell.— Specimen of Dendritic markings on Gneissose Rock from Broken Hill.

After the usual conversazione the meeting terminated.

## EXCURSION TO CHELTENHAM.

This excursion took place on Saturday afternoon, 17th August, its principal object being the collection of botanical specimens. The route taken was down Charnwood-road to the beach. Among the first plants found in the ti-tree were the little hooded orchid, Corysanthes pruinosa, and Cyrtostylis reniformis, in flower. On the track down to the "fossil beds" splendid specimens of Pterostylis curta and the beautiful Clematis microphylla were collected, specimens of the latter measuring several yards in length. Proceeding further along the ti-tree towards Sandringham, the following orchids were collected, either

in flower or in bud:—Acianthus exsertus, Pterostylis nutans, P. pedunculata, P. nana, P. concinna, Caladenia latifolia, Caladenia Patersoni; also a large specimen of Pterostylis longifolia, this orchid being now very scarce in this neighbourhood. Returning towards the station across the heath ground, the following plants were noticed in flower:—Hibbertia densiflora, H. stricta, Acacia oxycedrus, Styphelia virgata, S. humifusa, Craspedia Richea, Microseris Fosteri (the native edible yam), Hypoxis glabella, Aotus villosa, &c.—C. FRENCH, jun.

### ENTOMOGENOUS FUNGI.

By D. M'ALPINE.

(Read before Field Naturalists' Club of Victoria, 8th July, 1895.)

ENTOMOGENOUS fungi, or fungi growing upon insects, have already been brought under the notice of the Club, so that it will be unnecessary to dwell upon their general features. They seem to have reached their highest development in Australia, and are

therefore worthy of our special attention and study.

During the month of May I received from Mr. French, Government Entomologist, the larva of a moth, Darala (sp.), obtained by the Rev. E. H. Hennell, as well as a cockroach, Panesthia Australis, with fungi growing upon them. I propose in this paper giving a general account of the latter, together with the description of a species of Isaria kindly handed to me by Mr. Kershaw.

# I.—ENTOMOPHYTE ON COCKROACH (Panesthia Australis).

The insect is covered on the under surface of the body and sides as well as on the legs and slightly on the back with a white felty mould, inclining to cream colour. Under the microscope this is seen to consist of innumerable delicate threads or hyphæ, which are very fine, colourless, repeatedly branched, septate, and on an average about 2.5 to 3  $\mu$ . broad. The conidia, or reproductive bodies, are borne in tufts at irregular intervals along the hyphæ, and are also colourless, spherical, and averaging from 3 to 4  $\mu$ . in diameter. From the above description the fungus is seen to belong to the group of what are popularly called "moulds," or scientifically, *Hyphomycetes*. Next, it belongs to the order Mucedinaceæ, because the hyphæ are finely filamentous, pale in colour, lax and crowded, but not agglutinated together. Then it belongs to the section Amerosporeae, because the conidia are spherical, continuous, and colourless; and to the sub-section Macronemece because the hyphæ are elongated and distinct from the conidia; to the tribe Botrytide because the conidia are inserted on simple or branched hyphæ. It is probably a species of